



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,425	01/12/2001	Bart F. Rice	18721-5695	2323
758	7590	03/08/2006	EXAMINER	
FENWICK & WEST LLP SILICON VALLEY CENTER 801 CALIFORNIA STREET MOUNTAIN VIEW, CA 94041			CANGIALOSI, SALVATORE A	
			ART UNIT	PAPER NUMBER
			3621	

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/759,425

Applicant(s)

RICE, BART F.

Examiner

Salvatore Cangialosi

Art Unit

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 3621

1. All of the no-patent literature cited by applicant has now been considered since it has been included in the current application file. It is further noted that all of the cited references considered are readable on at least some of the claims since all appear to show binary spread spectrum sequences.

2. 35 USC 101 reads as follows:

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title".

3. Claims 2,7,10,11,16,19, 29-59 are rejected under 35 USC 101 because the claimed invention is directed to non-statutory subject matter.

The claims do not present a concrete, tangible or useful result.

In the present case, claims 2, 11 and 29 only recite an abstract idea. The recited steps of employing a temporal spreading code sequence does not produce a real world result since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. These steps only constitute an idea of how to employ a temporal spreading code sequence. In addition the claims are so broad as to present an issue of pre-emption of employing spreading codes sequences.

Art Unit: 3621

In the present case, the claim limitations are analogous to non-functional descriptive data (See MPEP 2106).

Claims 29-37 and 42-59 are outside the four statutory classes of invention since they recite an electromagnetic signal. Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se and as such are nonstatutory phenomena (O'Reilly, 56 US(15 How.) at 112-114). Moreover, it does not appear that the claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in 35 USC 101. First, a claimed signal is not a process under 35 USC 101 because it is not a series of steps. The claimed signal has no physical structure, does not itself perform any useful, concrete and tangible result and, this, does not fit within the definition of a machine. The claimed signal is not matter, but a form of energy, and therefore is not a composition of matter. The claimed signal, a form of energy, does not fall within either of the two accepted definitions of a manufacture which require either a physical substance or physical substance which a signal does not have. The claimed electromagnetic signal falls outside the four statutory classes of invention.

Art Unit: 3621

4. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

5. Claims 2-38 are rejected under 35 U.S.C. § 103 as being unpatentable over Frazier. Jr. or Kaufman et al in view of Short et al (all cited by applicant).

Regarding claim 2, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) disclose an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers and placed on a sinusoidal carrier substantially as claimed. The differences between the above and the claimed invention is the use of binary signals from shift registers which represent a portion of the information and sequences that change at various intervals. It is noted that the

Art Unit: 3621

symbols of the prior art described above show digital sequences representing symbols would be readable on the claim limitations.

It is further noted that all sequences change a various intervals since they require a finite time to output and describe a static or variable output. Short et al (See Figs. 2B-3) show a multibit sequences produces by a plurality of shift registers in a spread spectrum signal. It would have been obvious to the person having ordinary skill in this art to provide a similar arrangement for Frazier. Jr. or Kaufman et al because the digital signals and multibit sequences signals are conventional functional equivalents. Regarding the receiver limitations of claim 3, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with reception and transmission through a network which is a functional equivalent of the claim limitations. Regarding the network limitations of claim 4, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with reception and transmission through a network which is a functional equivalent

Art Unit: 3621

of the claim limitations. Regarding the transmitter limitations of claim 5, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with reception and transmission through a network which is a functional equivalent of the claim limitations. Regarding the network limitations of claim 6, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with reception and transmission through a network which is a functional equivalent of the claim limitations. Regarding plural sequence limitations of claim 7, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers which is a functional equivalent of the claim limitations. Regarding the phase limitations of claim 8, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8,

Art Unit: 3621

Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with plural phase symbol (See Frazier. Jr., Col. 2, lines15-20, or Kaufman et al, Col. 8, lines25-40) spreading that is a functional equivalent of the claim limitations. Regarding the phase limitations of claim 9, either Frazier. Jr.(See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al(See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with plural phase symbol (See Frazier. Jr., Col. 2, lines15-20, or Kaufman et al, Col. 8, lines25-40) spreading which is a functional equivalent of the claim limitations. Regarding sequence limitations of claim 10, either Frazier. Jr.(See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al(See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers which is a functional equivalent of the claim limitations. Regarding claim 11, either Frazier. Jr.(See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al(See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) disclose an assembly of spread spectrum signals created



Art Unit: 3621

from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers and placed on a sinusoidal carrier substantially as claimed. The differences between the above and the claimed invention is the use of binary signals from shift registers which represent a portion of the information and sequences that change a various intervals. It is noted that the symbols of the prior art described above show digital sequences representing symbols would be readable on the claim limitations.

It is further noted that all sequences change a various intervals since they require a finite time to output and describe a static or variable output. Short et al (See Figs. 2B-3) show a multibit sequences produces by a plurality of shift registers in a spread spectrum signal. It would have been obvious to the person having ordinary skill in this art to provide a similar arrangement for Frazier. Jr. or Kaufman et al because the digital signals and multibit sequences signals are conventional functional equivalents. Regarding the receiver limitations of claim 12, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with reception and transmission through a network which is a functional equivalent of the claim limitations. Regarding the network limitations of claim 13, either Frazier. Jr. (See

Art Unit: 3621

Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with reception and transmission through a network which is a functional equivalent of the claim limitations. Regarding the transmitter limitations of claim 14, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with reception and transmission through a network which is a functional equivalent of the claim limitations. Regarding the network limitations of claim 15, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with reception and transmission through a network which is a functional equivalent of the claim limitations. Regarding plural sequence limitations of claim 16, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and

Art Unit: 3621

claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers which is a functional equivalent of the claim limitations. Regarding the phase limitations of claim 17, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with plural phase symbol (See Frazier. Jr., Col. 2, lines 15-20, or Kaufman et al, Col. 8, lines 25-40) spreading that is a functional equivalent of the claim limitations. Regarding the phase limitations of claim 18, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with plural phase symbol (See Frazier. Jr., Col. 2, lines 15-20, or Kaufman et al, Col. 8, lines 25-40) spreading which is a functional equivalent of the claim limitations. Regarding sequence limitations of claim 19, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal

Art Unit: 3621

pseudorandom sequences by storage in a plurality of shift registers which is a functional equivalent of the claim limitations. Regarding claim 20, either Frazier, Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) disclose an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers and placed on a sinusoidal carrier substantially as claimed. The differences between the above and the claimed invention is the use of binary signals from shift registers which represent a portion of the information and sequences that change at various intervals. It is noted that the symbols of the prior art described above show digital sequences representing symbols would be readable on the claim limitations.

It is further noted that all sequences change at various intervals since they require a finite time to output and describe a static or variable output. Short et al (See Figs. 2B-3) show a multibit sequence produced by a plurality of shift registers in a spread spectrum signal. It would have been obvious to the person having ordinary skill in this art to provide a similar arrangement for Frazier, Jr. or Kaufman et al because the digital signals and multibit sequence signals are conventional functional equivalents. Regarding the receiver limitations of claim 21, either Frazier, Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et

Art Unit: 3621

al(See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with reception and transmission through a network which is a functional equivalent of the claim limitations. Regarding the network limitations of claim 22, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al(See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with reception and transmission through a network which is a functional equivalent of the claim limitations. Regarding the transmitter limitations of claim 23, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al(See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with reception and transmission through a network which is a functional equivalent of the claim limitations. Regarding the network limitations of claim 24, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al(See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom

Art Unit: 3621

sequences by storage in a plurality of shift registers with reception and transmission through a network which is a functional equivalent of the claim limitations. Regarding plural sequence limitations of claim 25, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers which is a functional equivalent of the claim limitations. Regarding the phase limitations of claim 26, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with plural phase symbol (See Frazier. Jr., Col. 2, lines 15-20, or Kaufman et al, Col. 8, lines 25-40) spreading that is a functional equivalent of the claim limitations. Regarding the phase limitations of claim 27, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with plural phase symbol (See Frazier. Jr., Col. 2, lines 15-20, or Kaufman et al, Col. 8,

Art Unit: 3621

lines 25-40) spreading which is a functional equivalent of the claim limitations. Regarding sequence limitations of claim 28, either Frazier, Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers which is a functional equivalent of the claim limitations. Regarding claim 29, either Frazier, Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) disclose an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers and placed on a sinusoidal carrier substantially as claimed. The differences between the above and the claimed invention is the use of binary signals from shift registers that represent a portion of the information from transmission and reception nodes. It is noted that all sequences change at various intervals. It is noted that the symbols of the prior art described above show digital sequences representing symbols would be readable on the claim limitations. Short et al (See Figs. 2B-3) show a multibit sequences produced by a plurality of shift registers in a spread spectrum signal from transmission and reception nodes. It would have been obvious to the person having ordinary skill in this art to provide a similar

Art Unit: 3621

arrangement for Frazier. Jr. or Kaufman et al because the digital signals and multibit sequences signals are conventional functional equivalents. Regarding the receiver limitations of claim 30, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with reception and transmission through a network which is a functional equivalent of the claim limitations. Regarding the network limitations of claim 31, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with reception and transmission through a network which is a functional equivalent of the claim limitations. Regarding the transmitter limitations of claim 32, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with reception and transmission through a network which is a functional equivalent of the claim limitations.



Art Unit: 3621

Regarding the network limitations of claim 33, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with reception and transmission through a network which is a functional equivalent of the claim limitations. Regarding plural sequence limitations of claim 34, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers which is a functional equivalent of the claim limitations. Regarding the phase limitations of claim 35, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with plural phase symbol (See Frazier. Jr., Col. 2, lines 15-20, or Kaufman et al, Col. 8, lines 25-40) spreading that is a functional equivalent of the claim limitations. Regarding the phase limitations of claim 36, either Frazier. Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12

Art Unit: 3621

and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers with plural phase symbol (See Frazier. Jr., Col. 2, lines 15-20, or Kaufman et al, Col. 8, lines 25-40) spreading which is a functional equivalent of the claim limitations. Regarding sequence limitations of claim 37, either Frazier Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers which is a functional equivalent of the claim limitations. Regarding sequence limitations of claim 38, either Frazier Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of orthogonal pseudorandom sequences by storage in a plurality of shift registers which is a functional equivalent of the claim limitations. Regarding sequence limitations of claim 39, either Frazier Jr. (See Figs. 6 and 7, Col. 6, lines 40-60, Col. 15, lines 45-60 and claims 12 and 15) or Kaufman et al (See Fig. 2, 8, Col. 8 lines 20-6 and claim 1) show an assembly of spread spectrum signals created from a plurality of unique orthogonal

Art Unit: 3621

pseudorandom sequences by storage in a plurality of shift registers which is a functional equivalent of the claim limitations.

**Examiner's Note:** Although Examiner has cited particular columns, line numbers and figures in the references as applied to the claims above for the convenience of the applicant(s), the specified citations are merely representative of the teaching of the prior art that are applied to specific limitations within the individual claim and other passages and figures may apply as well. It is respectfully requested that the applicant(s), in preparing the response, fully consider the items of evidence in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

6. Applicants arguments filed 12/19/2005 have been considered but are not persuasive.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory

Serial Number: 09/759,425

19

Art Unit: 3621

period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Salvatore Cangialosi at telephone number **(571) 272-6927**. The examiner can normally be reached 6:30 Am to 5:00 PM, Tuesday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell, can be reached at **(571) 272-6712**.

**Any response to this action should be mailed to:**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**or faxed to (571)273-8300**

Hand delivered responses should be brought to

United States Patent and Trademark Office  
Customer Service Window  
Randolph Building

Serial Number: 09/759,425

20

Art Unit: 3621

401 Dulany Street  
Alexandria, VA 22314

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 3600 Customer Service Office whose telephone number is (571) 272-3600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Anthony C. [Signature]*  
CHIEF OF OFFICE  
PRIMARY EXAMINER  
ART UNIT 3621